

REMARKS

Applicants sincerely appreciate the thorough examination of the present application as evidenced by the Final Action. Applicants appreciate the Examiner's allowance of Claims 16, 18-25 and 27-32 and the indication of allowable subject matter in Claims 4-11 and 14.

Applicants submit that all the claims are patentable over the cited references for at least the reasons discussed below. Accordingly, Applicants respectfully submit that this case is now in form for allowance.

The Section 103 Rejections:

Claims 1, 12 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over United States Patent No. 6,483,764 to Hsu et al. ("Hsu") in view of United States Patent No. 6,453,218 to Vergis ("Vergis"). Claim 15 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Hsu and Vergis in combination with United States Patent No. 5,278,796 to Tillinghast et al. ("Tillinghast"). Claims 2 and 3 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hsu and Vergis in combination with the Millman article. The rejections of these claims appear to be unchanged from those in the previous Office Action. Accordingly, Applicants will only respond herein to the response to arguments comments portion of the Final Action. However, Applicants submit that the claims are also not obvious for at least the reasons discussed in the Applicants' previous Amendment, which is incorporated herein by reference as if set forth in its entirety.

In the Allowable Subject Matter section of the Final Action, the Examiner states "Applicant believes that the temperature sensor circuit of Vergis does not have two states. The examiner respectfully disagrees." Final Action, pp. 5-6. Applicants will not reargue this point herein. However, the Examiner's statement appears to overlook numerous arguments in the previous Amendment as will be detailed below. Should the Examiner also disagree with these points, Applicants respectfully request an explanation of the basis for such disagreements from the Examiner.

Independent Claim 12 Includes Recitations Indicated as Patentable

Claim 12 stands rejected over Hsu in combination with Vergis although the reasons for the rejection of Claim 12 were not separately addressed in either the previous Office Action or the Final Action. Applicants submit that Claim 12 is patentable at least for substantially the same reasons as discussed previously with reference to Claim 1.

Furthermore, Applicants submit that Claim 12 is separately patentable as it contains recitations Applicants understand to correspond to the acknowledged reasons for allowance of Claim 4 in the previous Office Action. Office Action, p. 6. In particular, Claim 12 recites that the state of the temperature sensor circuit is "**selected by the temperature sensor output control signal.**" Accordingly, Applicants respectfully request withdrawal of the rejections of Claim 12 and Claims 13 and 15 that depend therefrom for at least these reasons. Should these rejections not be withdrawn, Applicants request an explanation from the Examiner of why Claim 12 is not allowable at least in light of the indicated patentability of Claim 4.

Arguments on Independent Claim 1 Not Considered in Final Action

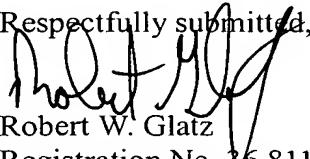
Claim 1 stands rejected over Hsu in combination with Vergis. The Final Action asserts that it is rejecting Applicants' previous argument that Vergis does not disclose or suggest the claimed temperature sensor circuit of Claim 1 having two states. However, this mischaracterizes Applicants' previous argument related to this issue and ignores a further argument presented in the last Amendment. In particular, Applicants actually argued that Vergis does not disclose or suggest the claimed temperature sensor circuit of Claim 1 having two states in which it is responsive to different inputs in each of the states. As is clear from the description of Figure 1 of Vergis, the output digital temp data 108 from the A/D converter 122 is responsive to the temperature sensitive diode 120. Vergis, Col. 2, lines 27-53. The transmission of the temperature from the A/D converter 122 may be based on the clock signal 112 or responsive to the control circuitry 106. Vergis, Col. 2, lines 47-53. Thus, the other two illustrated inputs to the A/D converter 122 are described solely as controlling the timing of transmission of temperature information, not as affecting the value of the

temperature reading. It follows that the temperature sensor 102 of Vergis does not disclose or suggest a temperature sensor circuit having a first state with an output based on a signal different from the temperature sensor input and a second state responsive to the temperature sensor input. The Final Action further ignores Applicants' previous argument that Vergis merely describes a sensor having the same "state" where the input conditions are controlled for purposes of calibration. Accordingly, the rejection of Claim 1 and Claims 2-3 that depend therefrom should be withdrawn for at least these reasons. Should these rejections not be withdrawn, Applicants request an explanation from the Examiner of how Vergis discloses or suggests a temperature sensor circuit having two states in which it is responsive to different inputs in each of the states as contrasted with responsive to the same inputs with external conditions controlled for the purpose of calibration in a factory.

In addition, the Final Action fails to address the arguments previously raised related to the basis for combining Hsu with the temperature sensor circuit of Vergis. In particular, Hsu is directed to a refresh rate adjustment circuit based on cell leakage monitoring rather than temperature compensation. **Accordingly, there is no evidence of a motivation to combine Hsu and Vergis in the manner relied on in the rejections.** Therefore, the rejection of Claim 1 and Claims 2-3 that depend therefrom should be withdrawn for at least these additional reasons. Again, should these rejections not be withdrawn, Applicants request an explanation from the Examiner of the basis for the combination relied on in the rejections.

CONCLUSION

Applicants respectfully submit that, for the reasons discussed above, the references cited in the present rejections do not disclose or suggest the present invention as claimed. Accordingly, Applicants respectfully request allowance of all the pending claims and passing this application to issue.

Respectfully submitted,

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